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Selected students at Marymount college of Virginia were tested to discover any differences between teacher-candidates who completed their training and those who did not and to see if certain characteristics or competencies correlated with achievement. Early prediction of success or dropout, in light of the great need for teachers, is important to avoid waste of time for both faculty and students. Marymount's 2-year elementary education curriculum is described. Its aim is to "provide basic general education of students who plan to continue ... toward a degree in elementary education at a college offering teacher training. Courses have been planned so that those who desire to teach before completing their degree preparation will have the basic requirements." This study examined the relation of intellectual ability, achievement in professional courses, avocational interests, and their presence or absence in candidates. The subjects were women registered for an A.A. degree in Education for the years 1958-59 to 1962-63; comparisons were made between 33 who did and 35 who did not continue at a 4-year institution. Using data from the scores of tests and profiles from both high school and Marymount, several correlations were made; their results are shown in tables. The primary conclusion was that the College Entrance Examination Board scores related substantially to the 4-semester scholastic index in junior college. Areas for further study are recommended. (HH)

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TRANSFER OR TERMINAL: A COMPARISON OF TWO GROUPS OF JUNIOR COLLEGE TEACHER-CANDIDATES

by

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JUNIOR COLLEGE
INFORMATION

TABLE OF CONTENTS

SUMMARY OF DISSERTATION. iii

ACKNOWLEDGEMENTS. iv

CHAPTER

I. INTRODUCTION. 1

Statement of the Problem
Purpose of This Study
Procedure
Related Literature

II. THE AMERICAN JUNIOR COLLEGE: GENESIS AND ROLE. 15

Marymount College of Virginia

History and Philosophy
Admission and Grading Policies
Elementary Education Curriculum

III. PREDICTIVE INDICES AND FINDINGS OF STUDY. . . . 22

Population Studied. Table 1
College Entrance Examination Board Scholastic Aptitude Test. Tables 2,3,4,5
Intelligence Tests and Scholastic Index.
High School Rank and Achievement. Tables 6,7
Personality Traits. Tables 8,9
Instruments Administered at MCV. Table 10

IV. CONCLUSIONS 34

Areas for Further Study

BIBLIOGRAPHY. 38

CHAPTER I

INTRODUCTION

Statement of the Problem

In the United States, vast resources are channeled yearly to education. There is an implied challenge to educators to elevate and refine standards, a challenge accepted by those in the profession who recognize the correlation between quality education and teacher ability and who are participating in the search for excellence.

In recruitment and retention of teacher-candidates, it would be most helpful to have more precise information about their characteristics, and the ways in which these characteristics operate in the area of vocational choice. While there has always been an understandable lack of unanimity concerning "teacher personality" and criteria for teacher effectiveness--due in part to wide variations among such value concepts, relative as they are to the socio-cultural group--intensive research over the past quarter of a century is providing a substantive foundation upon which to build. In his presentation to study groups at the 1961 conference of the National Commission on Teacher Education and Professional Standards, Dr. Nicholas Fattu stated that while there does not seem to be any such single person as the universally effective teacher, on the other hand it would be a mistake to assume that teacher competence is only what

the local school board or community opinion dictates.[1]

On the assumption that the teacher-training function could not be combined with the academic function, the early American colleges offered no education courses. The "normal school" of the early 19th century was charged with the sole duty of training teachers, generally in a two-year curriculum, and unhappily in an insular atmosphere, isolated from other institutions of higher education.[2] These two-year normal schools developed during the 1920's and 1930's into four-year teacher's colleges offering liberal arts courses. Currently, the uniquely American junior college is undertaking teacher-training functions geared to its particular role and objectives. The enrollment statistics are significant, for there are (as of October, 1967) 1,671,440 students registered in some 912 junior colleges in the United States.[3] In Virginia, plans have been made for the establishment of community colleges within a network of 22 regions. The subject of this study, Marymount College of Virginia, is one of 11 private junior colleges in the state.

In view of these numbers, then, certain questions might be posed. Are there any differences between those teacher-candidates who complete their training and take classroom assignments and those who fail to pursue their original intention? Are there characteristics or competencies which tend to correlate with achievement? Two

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[1]National Commission on Teacher Education and Professional Standards, New Horizons: The Becoming Journey. Official Report of The Pennsylvania Conference, 1961. (Washington, D.C.: National Education Association of the United States, 1962), pp. 103-105.

[2]H. E. Inlow, "Teacher Training and the Junior College," Junior College Journal, IV (January, 1934), 180.

[3]William A. Harper, ed., 1968 Junior College Directory (Washington, D.C.: American Association of Junior Colleges, 1968).

factors are exerting pressure. An ever-increasing number of teachers, effective teachers, is needed; and there is less time for wasted effort on the part of students and faculty--to the extent that the same kind of selective procedure long-used in medicine, nursing, law, and engineering may eventually be devised for the teaching profession.

Treading closely on this question of selection are those problems pertaining to criteria for teacher competence and the validity of suggested predictors of success. This entire area is to be approached with respectful caution, for college registrars uniformly attest that some students with borderline entrance requirements are later successful in their college work whereas some who appear most promising never fulfill that promise.

Knoell and Medsker, writing on the junior college student who transfers to a four-year institution, list some implications primarily for action rather than research, one in particular directed to junior college administrators:

> "There is need to study the characteristics of the students who persist and graduate from different types of institutions, as well as the students who are admitted as freshmen. Colleges should analyze the composition, characteristics and achievement of their graduating classes to find out what kinds of students are successful in their programs."[4]

Purpose of This Study

This particular study is an attempt to discern the relationship between certain of those characteristics generally agreed in the profession to be associated with teacher effectiveness, e.g., measured intellectual abilities, achievement in professional courses,

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[4]Dorothy M. Knoell and Leland L. Medsker, From Junior to Senior College: A National Study of the Transfer Student (Washington, D.C.: American Council on Education, 1965), p. 91.

certain avocational interests, and the presence or absence of those characteristics in the population of teacher-candidates studied.

Those competencies likely to be positively correlated or associated with teacher education in the abstract, in the contemporary United States, include: measured intellectual abilities, achievement in college course, general cultural and special subject-matter knowledge, professional information, generosity in the appraisal of behavior and motives of other people, strong interest in reading and literary matters, interest in music and painting, participation in social and community affairs, early experiences in caring for children (such as reading to children, taking a class for the teacher), history of teaching in the family, size of school, and size of community in which teaching, cultural level of community and participation in avocational activities.[5]

Procedure

Subjects selected were those women students who were registered in the course leading to the Associate in Arts degree with concentration in Education at Marymount College of Virginia during the academic years 1958-1959 to 1962-1963. A comparison was made between those students who continued their teacher-training progress at a four-year institution and those who did not continue. The total number of Education majors for the five-year period was 72, of whom 33 comprised Group I or those graduates who have transferred to a four-year institution of higher learning, and 35 comprised Group II, or those graduates who have not, as of this date, pursued their

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[5]David Garriott Ryans, "Criteria of Teacher Effectiveness," Encyclopedia of Educational Research, 3rd ed., 1960, 1487.

college education. One graduate is deceased. Some 40 institutions of higher learning were queried where transfer records were lacking, but in four cases the available information was inadequate, making a total population of 68 for this study. A form was devised on which to record pertinent data from the students' cumulative file folder, e.g., College Entrance Examination Board Scholastic Aptitude Test-Verbal and Mathematics scores, scores of high school intelligence tests, rank in high school class, and personality profile ratings submitted by high school personnel, together with scores of tests administered at Marymount College (The Adjustment Inventory (Bell) and Kuder Preference Record-Vocational), grade point average of professional courses considered germane to teacher-training[6], scholastic index, and rank in graduating class. Studies were made of the correlation between Scholastic Aptitude Test (SAT) scores and grade point average; SAT-Verbal scores and grade point average in education and psychology courses (below); intelligence test measurements and academic success; rank in high school class and junior college scholastic index; and personality ratings and grade point average in professional courses. It was found that the Bell Adjustment Inventory and Kuder Preference Record-Vocational were given during the first two years only of the period studied; however, the partial results are included.

Related Literature

A survey was made of the related literature to ascertain the character of research findings, the direction of trends in teacher-

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[6]History of Education, Children's Literature, Introductory Psychology, Child Psychology, Introduction to Education in the Elementary School, Principles and Practices of Elementary Education.

education, and the prognoses or recommendations growing out of these studies.

The findings of two significant research projects on teacher characteristics have refined the premises somewhat and have narrowed the range of objectives. A committee to study criteria of teacher effectiveness was formed in 1950 of members of the American Educational Research Association (upon the motion of Warren W. Coxe who later was to write a dissenting minority report criticizing the committee's report for defining teacher effectiveness in conceptual terms rather than in operational terms.[7] The committee implied that the "purpose of measurement or appraisal of teachers is to estimate whether they will produce desired amounts of changes in pupil behavior."[8] The deliberations of the committee ranged over the effectiveness of teachers on pupils (e.g., achievement of educational objectives as typified by taxonomies of educational objectives); on school operations (e.g., the development and application of school policy); and on school-community relationships (e.g., the climate of public opinion and cooperation between school and community).

David Garriott Ryans, one of the members of the Remmers committee (above), later directed a massive study of the same problem. Discussing his research in Testing Problems in Perspective, he stipulated that defining effective teaching is hazardous because of the relative nature of the criteria, his general operational definition

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[7]H. H. Remmers, chairman, "Report of the Committee on the Criteria of Teacher Effectiveness," Review of Educational Research, XXII (June, 1952), 263.

[8]Ibid., p. 243.

being "teaching is effective to the extent that the teacher acts in ways that are favorable to the development of basic skills, understandings, work habits, desirable attitudes, value judgments, and adequate personal adjustment of the pupil."[9] Ryans' Teacher Characteristics Study, begun in 1948, was a long-range project during which 100 separate researches were carried out with more than 6000 teachers in 1700 schools and 450 school systems. The TCS was an outgrowth of the National Teacher Examinations, which were limited to measurement of verbal and nonverbal abilities, basic English skills, general cultural knowledge, professional educational information, and understanding of subject matter to be taught. Ryans pointed out that the important role of personal and social behavior patterns of teachers had been recognized from the first, but that lack of reliable research data resulted in the limiting of the National Teacher Examinations to the above areas.[10] Among the approaches used in the TCS were graphic scales with operationally or behaviorally defined poles and/or units, observation check lists, forced-choice scales with the objectives of analyzing and describing patterns of teacher classroom behavior both directly by time sampling and indirectly by tape recordings. After statistical analysis of directly-observed behavior, three behavior patterns of elementary and secondary teachers appeared:

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[9]David Garriott Ryans, "Measurement and Prediction of Teacher Effectiveness--1958," in Testing Problems in Perspective, ed. by Anne Anastasi (Washington, D.C.: American Council on Education, 1966), p. 226.

[10]David Garriott Ryans, Characteristics of Teachers: Their Description, Comparison, and Appraisal (Washington, D.C.: American Council on Education, 1960), p. 368.

"TCS Pattern X - warm, understanding, friendly, vs. aloof, egocentric, restricted teacher behavior.
"TCS Pattern Y - responsible, businesslike, systematic, vs. evading, unplanned, slipshod teacher behavior.
"TCS Pattern Z - stimulating, imaginative, surgent, vs. dull, routine teacher behavior."[11]

Ryans mentions that these patterns are not entirely unique to the TCS, being supported by other reports and data. He regards the patterns as possessing sufficient reliability to permit their use in comparisons of teacher groups. At the elementary level, Patterns X, Y, and Z were highly intercorrelated and each also seemed to be highly correlated with pupil behavior in teachers' classes. While emphasizing the extreme caution which must be used in interpreting the generalizations, Ryans listed certain characteristics of outstanding teachers:

"Superior intellectual abilities, above-average school achievement, good emotional adjustment, attitudes favorable to pupils, enjoyment of pupil relationship, generosity in the appraisal of the behavior and motives of other persons, strong interests in reading and literary matters, interest in music and painting, participation in social and community affairs, early experience in caring for children and teaching (such as reading to children and taking a class for a teacher), history of teaching in family, family support of teaching as a vocation, strong social service interests."[12]

Related literature also presented research studies of teacher candidates, casting light on the operation of those factors mentioned in the Procedure of This Study, e.g., academic aptitude, personality traits, intelligence and achievement. Leland R. Cooper (1968) studied 584 graduates from two Florida junior colleges in an effort to analyze differences between those who transferred and those who

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[11] Ibid., p. 382.

[12] Ibid., p. 366. Cf. p. 4 above, "Purpose of This Study."

did not. His findings were that 62.5 percent actually enrolled at some 83 senior institutions, while 37.5 percent had not transferred two years after graduation. However, a statistical analysis of the continuers and non-continuers revealed no significant difference between the two groups in regard to 12 factors commonly thought to be of importance in the prediction of academic success or persistence in reaching educational goals, e.g., age at matriculation, father's primary occupation, father's educational level, mother's educational level, Cooperative School and College Ability Test (verbal), Cooperative School and College Ability Test (quantitative), final grade point average, chief means of financial support as a student, marital status as a sophomore, number of brothers and sisters, number of semesters enrolled, and number of semester hours earned. In a t-test analysis only two of these factors (number of semester hours enrolled and number of semester house earned) had differences large enough to be significant at the .05 level of significance. Cooper suggests:

> "Study of the following might prove beneficial to the college: (a) attitudes of entering students, (b) values of the students, (c) interests of the students, (d) the influence of the home, (e) the influence of the peer groups in the junior college, (f) the influence of college teachers, and (g) the influence of student personnel services."[13]

College Entrance Examination Board (Verbal) scores did show a significant difference in favor of students who went on to graduation in comparison with those who dropped out in a 1964 study made

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[13]Leland R. Cooper, "The Difficulty of Identifying the Real Transfer Student," Junior College Journal, XXXVIII (January, 1968), 38.

at Mt. Mercy College, Philadelphia, Pa. However, CEEB quantitative scores showed no significant difference.[14]

A 1963 study of 464 freshmen and sophomore students at the University of California-Santa Barbara examined those who pursued their teacher-training program to practice teaching (Group A) in comparison with those who failed their colleg work (Group B) or changed major (Group C). Among other conclusions, Group A (those who persisted) appeared to excel in "what are judged as desirable personality traits."[15] Durflinger also found that Group A ranked below B and C in academic aptitude, even though B was the group failing.

Yamamoto and Davis, in the Journal of Teacher Education, explored the differences between candidates for teaching at the various grade levels, concluding that the different preparatory programs tended to attract students with different motivational characteristics, with the early childhood program represented by students whose critical and power motivation are significantly lower than those of secondary or elementary education students.[16]

Students (114) in an educational psychology course at Wisconsin State College at Plattville, Wis., were examined by means of a 19-page

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[14]Betsy Swisdak and S. Rita Flaherty, "A Study of Personality Differences Between College Graduates and Dropouts," Journal of Psychology, LVII (January, 1964), 25-8.

[15]Glenn W. Durflinger, "Academic and Personality Differences Between Women Students Who Do Complete the Elementary Teaching Credential Program and Those Who Do Not," Educational and Psychological Measurement, XXIII (Spring, 1963), 775-783.

[16]Kaoru Yamamoto and O. L. Davis, Jr., "Teachers in Preparation: I. Motivation, Ideational Fluency, and Interpersonal Attitude," Journal of Teacher Education, XXX (Summer, 1966), 205-209.

booklet, the "K" score of the Minnesota Multiphasic Personality Inventory, the Minnesota Teacher Attitude Inventory, and a 10-item attitude scale measuring student attitude toward the course and the method of instruction. The "K" score, designed to measure student emotional stability and test-taking attitude, had a low correlation with intelligence as measured by the California Test of Mental Maturity. For these subjects, intelligence was shown to have a relatively high correlation with achievement as indicated by grade point average. The MTAI, designed to measure those attitudes which will predict how good the subject's pupil-interpersonal relations will be (as well as how satisfied the subject is with teaching as a vocation) provided data indicating that these subjects had a somewhat undesirable attitude in this area. The author surmised that the family background (largely farming) was perhaps autocratic in character.[17]

The Adjustment Inventory (Bell) was one of a battery used by Seagoe in studying selection of students in schools of education. For 125 students, no significant relationships were found between the tests of intelligence, special aptitudes, achievement, interest or values and the ratings of success in practice teaching. Relationships between personality inventory scores and ratings in practice teaching were significant, those for the Bell being -.40 (total adjustment).[18]

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[17]Lester Dale Vertein, "A Study of the Personal-Social and Intellectual Characteristics of a Group of State College Students Preparing to Teach," Journal of Experimental Education, XXX (December, 1961), 159-192.

[18]M. V. Seagoe, "Permanence of Interest in Teaching," Journal of Educational Research, XXXVIII (May, 1945), 678-684.

Smith concludes that "in spite of the low validity of teachers' marks, high school records have been found to be useful, especially when combined with other evidences of student ability and drive."[19] High school grades are affected by the variation among teachers' grading policies, but Smith feels that the pooled judgment validity may be high, in that the high school graduate with 16 units will have been graded, quite possibly, on 80 examinations by 16 instructors. In Smith's opinion, the best single indicator of scholastic success in any given semester is the previous semester's record.[20]

Rank in high school class is generally agreed to be a measure best used in conjunction with others, inasmuch as there are no explicit answers to the vexing questions of rank plaguing admissions officers, e.g.:

(1) Is ranking students democratic?

(2) Is class rank a valid predictor of success in college?

(3) What about differences among schools--does a given high school percentile rank represent the same level of achievement, regardless of the school in which it was earned?[21]

(4) What students, and what grades, should be included in calculating rank?

(5) Should grades in accelerated or honors courses be weighted?[22]

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[19]Francis F. Smith, "The Use of Previous Record in Estimating College Success," Journal of Educational Psychology, XXXVI (March, 1945), 167.

[20]Ibid., p. 175

[21]In this thesis, the size of the high school graduating classes involved ranged from 20 to 579.

[22]Evaluating the Applicant: The Role of Rank in Class," College and University, XLII (Summer, 1967), 513.

The problem of vocational choice is perhaps more pressing and urgent at the junior college level, where the adolescent, so recently a high school senior, is expected to signify a mature decision.[23] Super, addressing an American Psychology Association meeting in 1952, discussed the diverse theories of vocational choice and proposed a synthesis. His summary of a comprehensive theory is stated in 10 propositions, here condensed:

(1) By virtue of individual differences, people are qualified for different occupations, but there is tolerance for people to fit into more than one field.

(2) Choice and adjustment are a continuous process, with vocational preferences, competencies, self-concepts changing with time and experience (although self-concepts are generally fairly stable after late adolescence). This process can be guided.

(3) The nature of the career pattern is determined by the individual's parental socioeconomic level, mental ability, personality characteristics, and opportunities.

(4) Super's main theme:

> "The process of vocational development is essentially that of developing and implementing a self concept: it is a compromise process in which the self concept is a product of the interaction of inherited aptitudes, neural and endocrine make-up, opportunity to play various roles, and evaluations of the extent to which the results of role playing meet with the approval of superiors and fellows."[24]

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[23]This requirement that students be committed to teaching at the 13th grade level (as contrasted to the time allowed for decisions in law, engineering, and medicine) is cited as one of the major faults of the two-year normal school for teachers. Inlow, op. cit.

[24]Donald E. Super, "A Theory of Vocational Development," American Psychologist, VIII (May, 1953), 190.

The "compromise process" is worked out, according to Super, by role playing in fantasy or in real-life activities such as classes, extra-curricular activities, job situations, etc.

CHAPTER II

THE AMERICAN JUNIOR COLLEGE: GENESIS AND ROLE

In a study of junior college students, it is relevant to scan the history of the two-year college, that American creation which has contributed so much to the uniqueness and diversity of higher education in this country. In 1892, William Rainey Harper, president of the new University of Chicago, envisioned a realignment of higher education, with the first two years as collegiate and the third and fourth years as university in nature. Other educators, notably William Watts Folwell of Minnesota and Henry P. Tappan of Michigan, had proposed a "bifurcated university" of this nature but it was Harper's introduction of the term "junior college" which gave the idea great appeal. It was Harper, also, who in 1901 was influential in establishing Joliet (Ill.) Junior College which is regarded as the first such institution operating under public control. Joliet's beginnings were typically informal, more an extension of the secondary school system. Not until 1917, when the institution was accredited by the North Central Association of Colleges and Secondary Schools, was the name "junior college" used.[25]

Functions of the junior college gradually evolved into the providing of:

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[25]Ralph R. Fields, The Community College Movement (New York: McGraw-Hill Book Company, Inc., 1962), pp. 26-27.

(1) university-parallel programs or transfer courses for those students interested in remaining near their homes or desiring two years of college work at a more reasonable cost. These programs also offer opportunities for students with a mediocre high school scholastic record to improve that record before transferring to a four-year institution--with the present likelihood in the United States that more and more college applicants will have had one or two years of previous college experience.

(2) terminal programs of a semi-professional, technical or occupational nature; and

(3) adult education in response to the cultural or vocational needs of the community.

The growth of the junior college was especially rapid in the first 40 years of this century, spurred by the democratic, equal-opportunity spirit of the times, by the depression of the thirties acting as a force to keep young people off the labor market, by recurring and often drastic changes in the occupational patterns in America.[26] This tremendous expansion has brought with it great diversity in the ranks of junior colleges--public or private operation, and wide variations in size, administration, objectives, and nature of student bodies. According to Fields, as ever-increasing numbers of high school graduates were attracted to the junior college, the character of student bodies changed from primarily transfer-oriented to a cross-section of the total population--mentally, socially, and economically.[27] Medsker, writing on "The Junior College Student",

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[26] Ibid., pp. 47 ff.

[27] Ibid., p. 58.

states that Flanagan et al.[28] have offered the best evidence concerning the academic ability of a nationwide sample of junior college students in that all took the same aptitude test at the same time. Medsker states that the conclusion was drawn by the investigators that junior college freshmen are very much like high school seniors with respect to the distribution of their academic aptitude, with a mean score "very similar to that of high school seniors and... considerably below the mean for students who entered four-year institutions."[29] Blocker et al. would place the average junior college freshman at about the 30th percentile of the four-year college group.[30]

The junior college is faced with the task of educating highly diversified classes in highly differentiated curriculums, functioning as an agency through which the student can test his capacities and orient his vocational choice. In this connection, Medsker notes that the transfer program is becoming more uniform because of the trend (varying among regions of the country) away from specialization and toward a base of liberal arts in the lower-division curriculum.[31]

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[28]J. C. Flanagan et al., The American High School Student. Report of Project Talent: The identification, development, and utilization of human talents. (Pittsburgh: University of Pittsburgh, 1964).

[29]National Committee for Appraisal and Development of Junior College Student Personnel Programs, Junior College Student Personnel Programs: Appraisal and Development (New York, N.Y.: Carnegie Corporation, 1965), p. 7.

[30]C. E. Blocker, R. H. Plummer, and R. C. Richardson, The Two-Year College: A Social Synthesis (Englewood Cliffs, N.J.: Prentice-Hall, 1965), p. 14.

[31]Medsker, op. cit., p. 52.

This trend would seem to pose a dilemma between reduction in the variety of specialized courses on the one hand and the desirability of offering students exposure to many career choices on the other.

Marymount College of Virginia

History and Philosophy

Marymount is one of the system of elementary, secondary, and collegiate institutions operated by the Religious of the Sacred Heart of Mary, the first institution, Marymount College, opening in 1907 at Tarrytown, N. Y. Marymount College of Virginia, the only Catholic institution of higher learning in the Commonwealth, was founded in 1950 with a class of 13 women freshmen. In 1968, there is a capacity enrollment of some 800 students and the faculty has been expanded to maintain a low faculty-student ratio. The aims of the college as stated in the catalog (p. 4) are "the development of each student to her maximum intellectual potential. This development of intellectual ability is reflected in more than academic achievement. A fully developed intellect manifests itself in a continually inquiring and creative mind; an informed and meaningful spiritual life; a constant awareness of the realities of the human society in which one lives, and of individual responsibilities in a changing world; and the maintenance of as healthy a physical and psychological well-being as one's endowments will permit."

Marymount College is accredited by the Virginia State Department of Education and the Southern Association of Colleges and Schools, and is registered by The University of the State of New York.

Admission and Grading Policies

Requirements for admission are graduation from a high school accredited, at least, by its state board of education; a satisfactory scholastic record with a minimum of 16 credits; satisfactory academic and personal recommendations; and the College Entrance Examination Board Scholastic Aptitude Test (p. 32, catalog).

For any educational institution, the optimum admissions policy would be selective placement in a course of study congruent with talents and educational background. Roueche and Sims emphasize that the present mortality rate in college parallel programs is too high, and urge that admission to junior college be based on professional decisions tailored to the individual student.[32]

In the grading system used, a grade of A is equivalent to 4.00. The catalog states (p. 39): "A C grade earned at MCV indicates successful performance at an average level of college achievement as it may be seen in a broad spectrum of American institutions of higher learning. 'Average' is not to be understood as 'mediocre'."

Knoell and Medsker, discussing grade point differential and the gap between junior college and senior college, note that a realistic goal would be to try for "a differential which most transfer students can 'afford', i.e., a drop in grades which will not result in an average below C. Transfer students whose junior college

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[32]John E. Roueche and David M. Sims, "Open-Door College or Open-Door Curriculum," Junior College Journal, XXXVIII (February, 1968), 19. The title refers to The Open Door College: A Case Study by Burton R. Clark (New York: McGraw-Hill Book Company, Inc., 1960) in which Clark states that two-thirds of junior college students are in transfer curricula although only one-third of them actually will transfer to senior colleges (p. vii). Clark calls those students who never transfer the "latent terminals". Roueche and Sims add that the open-door will be merely the revolving door if realistic goals are not set.

average is only 2.3 can ill afford a differential of -.5; however, a group whose average is 2.8 could experience a drop in grades of this magnitude without fear of probation and dismissal."[33]

A minimum index of 1.80 is required for graduation, with completion of 64 semester hours. The college offers Associate in Arts programs in Education, Fine Arts, General Liberal Arts, and Physical Education. Associate in Applied Science degrees may be concentrated in Medical Secretarial, Merchandising, Nursing, and Secretarial courses.

Elementary Education Curriculum

The curriculum at Marymount College of Virginia is shaped by stated objectives and goals which in turn are derived from a philosophical position regarding criteria of excellence in education. The aim of the elementary education curriculum at MCV as formulated in the catalog (p. 44) is "to provide basic general education for students who plan to continue their studies toward a degree in elementary education at a college offering teacher training. Courses have been planned so that those who desire to teach before completing their degree preparation will have the basic requirements."

The two-year curriculum in Elementary Education comprises the following:

FRESHMAN YEAR

	Credits
English	6
Theology	3
Philosophy	3
Science or Mathematics	3-6
Speech or Elective	3
History of Education	3
Children's Literature	3
U. S. History	6
Physical Education	-
Total	33- 35

33Knoell-Medsker, op. cit., p. 95.

SOPHOMORE YEAR

	Credits
English	6
Theology	3
Philosophy	3
Science or Mathematics	3-6
Speech or Elective	3
Problems, Principles and Methods of Elementary Education	6
General or Child Psychology	3
Modern Political Concepts	3-6
Total	33-36

Elementary Education students are offered the opportunity of observation in local private, parochial, and public schools.

CHAPTER III

PREDICTIVE INDICES AND FINDINGS OF STUDY

A tremendous volume of research has been carried on with the single objective of estimating success in professional training, with results characterized by negligible to positive significance. Stuit lists all possible avenues of investigation, including personal history data, previous educational records (scholastic and extra-curricular), scholastic aptitude tests, scholastic achievement tests in specific subject areas, special aptitude tests, indices of personality, interest inventories, and perhaps a combination of two or more of these.[34] According to Goldman, the best predictor of college success is found in the high school average, with the next effective being achievement tests of high school content courses, general college aptitude tests, and special aptitude tests in verbal or mathematical areas.[35]

Population Studied

For the population of 68 in this study, Table 1 indicates the percentage who continued their education by transferring to a four-year institution of higher learning, and the percentage who have not, as of this date, been registered in such an institution.

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[34]Dewey B. Stuit et al., Predicting Success in Professional Schools (Washington, D.C.: American Council on Education, 1949), pp. 6-9.

[35]Leo Goldman, Using Tests in Counseling (New York: Appleton-Century-Crofts, Inc., 1961), p. 335.

TABLE 1

MCV GRADUATES WITH CONCENTRATION IN EDUCATION (1959-1963) TRANSFERRING TO FOUR-YEAR INSTITUTIONS

	1959	1960	1961	1962	1963	Total	Percent
Group I (Continuers)	4	7	1	10	11	33	49%
Group II (Non-Continuers)	3	7	9	5	11	35	51%
	7	14	10	15	22	N 68	

College Entrance Examination Board Scholastic Aptitude Test

The CEEB-SAT has been constantly refined since its introduction in 1926. While agreeing that past performance is the best index of future performance, the Board regards the Scholastic Aptitude Test as a common measure of ability which will override the differences in high school courses, academic standards, and grading systems. The five sections of the SAT test two basic abilities, verbal and mathematical, which have proven the best predictors. Item types include vocabulary opposites, sentence completion, analogies, and reading comprehension; and simple algebra, geometry, and ingenuity.[36] Scores range from a low of 200 to a high of 800, with a mean of 500 and a standard deviation of 100. Table 2 presents the distribution of CEEB-SAT scores for the population studied.

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[36]College Entrance Examination Board, A Description of the College Board Scholastic Aptitude Test (Princeton, N.J.: College Entrance Examination Board, 1968), pp. 11-31.

TABLE 2

DISTRIBUTION OF CEEB-SAT SCORES FOR ENTERING FRESHMEN (1959-1963)

	Verbal Section		Mathematical Section	
Scores	Group I	Group II	Group I	Group II
550 - 599	1	0	1	0
500 - 549	3	1	0	1
450 - 499	3	6	4	2
400 - 449	7	10	10	2
350 - 399	7	10	6	16
300 - 349	8	4	6	9
250 - 299	0	1	2	2
	N 29*	N 32*	N 29	N 32
	Mean 404.4	404.2	Mean 395.2	368.3
	S.D. 15.35	11.70	S.D. 12.52	20.97

*For 7 graduates, CEEB-SAT scores were not available and the College Ability Test scores supplied were not comparable.

In computing the coefficient of correlation between SAT scores and achievement of the population studied, certain assumptions were made, e.g., that the correlation would be smaller for a select group than for a group with a wide range of ability; that the more restricted the spread of scores, the lower the correlation would be; that causal factors (student effort, previous learning, etc.) not involved equally in both variables would lower correlation; and that the relation of the work of the course at MCV would be close to the work of the aptitude test of which the SAT is a sample. The following

equivalencies were used to determine whether there exists any correlation (over and above chance) between two variables, and what that degree of relationship might be:

.00 to ±.20	denotes	indifferent or negligible relationship
±.20 to ±.40	"	low correlation--present but slight
±.40 to ±.70	"	substantial or marked relationship
±.70 to ±1.00	"	high to very high relationship[37]

Table 3 indicates the correlation between quantitative Scholastic Aptitude Test scores and scholastic index for the two groups studied.

TABLE 3

CORRELATION CEEB-SAT (V AND M) AND SCHOLASTIC INDEX (FOUR SEMESTERS)

	Mean CEEB-SAT Score (Verbal and Math)	Mean Scholastic Index (4 semesters)	r
Group I (N 29)	799.8	2.24	.52
Group II (N 32)	770.0	2.20	.39

That the most useful single index of probable success in teacher-training curriculum might be found in the individual's performance on general achievement tests, particularly in the field of English[38] was not supported in this study. Table 4 indicates negligible relationship. For 58% of Group I, the grade point average in education and psychology courses was higher than the overall

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[37]Henry E. Garrett, Statistics in Psychology and Education. 6th ed. (New York: David McKay Company, Inc., 1966), p. 176.

[38]Stuit et al., op. cit., pp. 156ff.

scholastic index. For Group II, 53% had a higher grade point average in education and psychology courses than the overall scholastic index--the slight difference probably indicative of area of interest.

TABLE 4

CORRELATION CEEB-SAT SCORE (VERBAL ONLY) AND TEACHER-TRAINING COURSE ACHIEVEMENT

	Mean CEEB-SAT Score (Verbal only)	Mean GPA in Professional Courses (cf. note 6 above)	r
Group I	404.4	2.28	.11
Group II	401.9	2.18	.29

Simple expectancy charts, such as Table 5 based on this population, can be used in counseling entering freshmen.

TABLE 5

SIMPLE EXPECTANCY TABLE BASED ON CEEB-SAT QUANTITATIVE SCORES AND SCHOLASTIC INDEX (FOUR SEMESTERS)

Scores	Earned Scholastic Index of 1.99 or less	Earned Scholastic Index of 2.00 or more (C aver.)	N
Scored 799 or less on CEEB-SAT (Vand M)	Group I..... 5 Group II..... 8 Total Number...13 Percent.....32.5%	Group I..... 12 Group II..... 15 Total Number.. 27 Percent.....67.5%	40
Scored 800 or more on CEEB-SAT (Vand M)	Group I..... 1 Group II..... 1 Total Number... 2 Percent.....10%	Group I.....11 Group II..... 8 Total Number...19 Percent.....90%	21
		Total	61

Intelligence Tests and Scholastic Index

Of the 68 graduates in this study, the high school transcripts of only 39 supplied reliable data for measured intelligence. In the balance of cases, the transcripts were vague, ambiguous, or incomplete insofar as intelligence test scores were concerned, and it was not possible, therefore, to derive significant conclusions. By referring to examiner's manuals for tests administered, raw scores were translated into percentile norms measuring relative position. The percentile ranks were converted to t-scores.[39] for purposes of computing correlation between intelligence quotient and scholastic index or achievement. The mean t-score for Group I was 53.4; for Group II, 52.6. For Group I, a correlation of .25 was found between t-score and scholastic index (four semesters); and for Group II, a correlation of .06. For those in Group I, who continued their studies, no relationship was indicated between measured intelligence and grade point average in teacher-training courses taken in junior college; while for Group II, who did not pursue their college work, a correlation of .36 was shown between these two variables.

High School Rank and Achievement

With reference to high school performance, Stuit remarks[40] on the disparity existing between grading practices in high schools and in teacher-training institutions. The great variations in marking techniques as well as academic standards affect both the validity and reliability of the high school record as a device to predict probable achievement in academic work.

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[39]Lee J. Cronbach, Essentials of Psychological Testing, 2nd ed. (New York: Harper & Brothers, Publishers, 1960), Table 5, p. 85.

[40]Stuit et al., op. cit., pp. 143-144.

However, rank-in-class is regarded by many admissions officers as a significant factor, involving performance and motivation. Research cited in College and University indicated rank-in-class to be the best single predictor of college grades.[41]

Knoell and Medsker found a correlation between high school rank and grade point average earned in junior college of .24 at one college; .52 at another, and .36 at another.[42] In this study, a correlation of .11 was found for Group I and .38 for Group II. Table 6 presents a comparison of high school rank and freshman scholastic index for this study.

TABLE 6

COMPARISON OF HIGH SCHOOL RANK AND FRESHMAN SCHOLASTIC INDEX

First Year Junior College	Rank in High School Graduating Class				
	4th Quarter	3rd Quarter	2nd Quarter	1st Quarter	Totals
3.00 and over	Group I...1 Group II..0 Total.....1	Group I...2 Group II..0 Total.....2	Group I...0 Group II..0 Total.....0	Group I...0 Group II..0 Total.....0	Group I...3 Group II..0 Total.....3
2.00-2.99	Group I...6 Group II..5 Total....11	Group I...3 Group II..8 Total....11	Group I...2 Group II..1 Total.....3	Group I...0 Group II..2 Total.....2	Group I..11 Group II.16 Total....27
1.00-1.99	Group I...5 Group II..8 Total....13	Group I...5 Group II..5 Total....10	Group I...4 Group II..2 Total.....6	Group I...0 Group II..0 Total.....0	Group I..14 Group II.15 Total....29

N 59*

*For 9 graduates, no rank was entered on the high school transcript.

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[41] "Evaluating the Applicant", op. cit., p. 513.

[42] Dorothy M. Knoell and Leland L. Medsker, Factors Affecting Performance of Transfer Students From Two- to Four-Year Colleges: With Implications for Coordination and Articulation (Berkeley, Cal.: Center for Study of Higher Education, University of California, 1964), p. 100.

Table 7 presents a comparison of rank in high school and in junior college.

TABLE 7

COMPARISON OF RANK IN GRADUATING CLASSES: HIGH SCHOOL AND JUNIOR COLLEGE

Junior College Graduating Class	Group I		Group II	
	Number	Percent	Number	Percent
Number who had moved up in rank	12	42%	12	39%
Number who had remained in same rank	8	29%	11	35%
Number who had dropped in rank	8	29%	8	26%
	N 28		N 31	

Personality Traits

The oft-quoted theorem that the teacher brings her whole self to class and not merely wide knowledge of the subject imputes a certain significance to personality traits. Teachers at the elementary level, moreover, ought to be "specialists in children" rather than in subject matter and methods, according to Commins and Fagin.[43] With due regard, then, for 'halo effect'--the term coined by Edward L. Thorndike to designate the tendency of a rater to rate a subject on a

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[43] W. D. Commins and Barry Fagin, Principles of Educational Psychology, 2nd ed. (New York: The Ronald Press Co., 1954), p. 195.

specific trait according to his general impression of him--the rationale underlying the rating of personality might be as expressed by Cronbach:

> "The postulate that traits exist is supported by three facts: Personalities possess considerable consistency; a person shows the same habitual reactions over a wide range of similar situations. For any habit, we can find among people a variation of degrees or amounts of this behavior. Personalities have some stability, since the person earning a certain score this year usually has a somewhat similar score next year."[44]

There is no doubt an ample margin of error in the ambiguity of terms and in the subjective variability of raters. For this study ratings were obtained from forms which had been completed by personnel (administrative, teaching, counseling) of the subjects' high schools. Table 8 presents this form as abbreviated for use in this study.

TABLE 8

PERSONALITY TRAITS RATING FORM SENT BY MCV TO HIGH SCHOOLS (ADAPTED FOR USE IN THIS STUDY)

	Above the Average			Average	Below Average	
	Exceptionally	Distinctly	Slightly		Slightly	Decidedly
Industry						
Initiative						
Reliability						
Leadership						

Of the 68 subjects in this study, personality ratings were available for 54, 27 in each group. Table 9 presents the findings.

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[44]Cronbach, op. cit., p. 500.

TABLE 9

PERSONALITY TRAITS OF HIGH SCHOOL SENIORS
RATED BY HIGH SCHOOL PERSONNEL

		Above Average		Average		Below Average		Totals
		No.	Percent	No.	Percent	No.	Percent	
INDUSTRY	Group I	15	56%	10	37%	2	.07%	27
	Group II	12	44%	7	26%	8	30%	27
INITIATIVE	Group I	8	30%	14	52%	5	18%	27
	Group II	9	33%	8	30%	10	37%	27
RELIABILITY	Group I	20	74%	5	19%	2	.07%	27
	Group II	13	48%	11	41%	3	11%	27
LEADERSHIP	Group I	10	37%	12	44%	5	19%	27
	Group II	11	41%	8	30%	8	30%	27
								N 54

Table 9 indicates that in Industry, 93% of Group I (Continuers) were rated Average or Above Average; 70% of Group II (Non-Continuers) were rated Average or Above Average. In Initiative, 81% of Group I were rated Average or Above Average; 63% of Group II were rated Average or Above Average. In Reliability, 93% of Group I were rated Average or Above Average; 89% of Group II were rated Average or Above Average. In Leadership, 81% of Group I were rated Average or Above Average; 70% of Group II were rated Average or Above Average.

Examined from another aspect, e.g., the percentages of each group rated Below Average in desirable personality traits:

Below Average Ratings In:	Group I	Group II
Industry	.07%	30%
Initiative	19%	37%
Reliability	.07%	11%
Leadership	19%	30%

Instruments Administered at MCV

The Adjustment Inventory (Bell) was administered to entering freshmen at MCV during the first two years of the period studied. With this instrument, four adjustment scores are obtained (home, health, social, and emotional) and a score of high or low on these dimensions tends to reveal an individual's subjective impression of his own adjustment in these areas. Table 10 presents these partial results, which are inconclusive.

TABLE 10

COMPARISON OF ADJUSTMENT INVENTORY (BELL) SCORES

	Average to Exc.	Unsat.	Average to Exc.	Unsat.	Average to Aggressive	Retiring to Unsat.	Aver. to Exc.	Unsat.
Group I N 11	11	0	10	1	9	2	9	2
Group II N 10	8	2	8	2	10	0	9	1

Seago's studies mentioned earlier, which made use of the Bell Adjustment Inventory among other instruments, found no statistically significant difference between two groups, those who remained in teacher-training and those who left during the period studied, but

> "The consistency of direction of certain differences suggests the hypothesis that the bright-maladjusted individual may leave teacher-training more often than the well adjusted individual of any level of intelligence or than the maladjusted individual of normal or relatively low ability."[45]

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[45]Seagoe, op. cit., p. 684.

Alteneder found a relation between social adjustment on the Bell Inventory and teaching interest.[46]

The second instrument administered at MCV, but for the first two years only of the period studied, was the Kuder Preference Record-Vocational. Specific uses for this inventory, as stated in the manual, are to point out vocations with which the student may not be familiar but which involve activities of the type for which he has expressed preference, and in addition, to check on whether a person's choice of an occupation is consistent with the type of activity he ordinarily prefers to do. Scores determine the profile, with the profile of primary school teachers highest in art, literature, music, and social service. There is, of course, the critical unknown factor whether the individual has the measured ability or aptitude to perform the functions of the vocation in which he expresses interest. Interest inventories tend to predict which field a person will enter, rather than the degree of success he may have. Of Group I, nine subjects completed the KPR-V; eight of these scored above the 75th percentile (significant level according to the manual) in Social Service. Of Group II, 10 completed the KPR-V; six of these scored above the 75th percentile in Social Service. No significance can be attached to these findings.

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[46]L. E. Alteneder, "The Value of Intelligence, Personality, and Vocational Interest Tests in a Guidance Program," Journal of Educational Psychology, XXXI (Sept., 1940), 449-459.

CHAPTER IV

CONCLUSIONS

In this study, College Entrance Examination Board scores were shown to have a substantial relationship to the four-semester scholastic index in junior college. A simple expectancy table with current scores and grades should be useful in clarifying the probabilities of academic success for entering freshmen. Though the exact nature of factors influencing professional success is elusive, it seems advisable, insofar as selection of teacher-candidates is concerned, that wasted effort be avoided; and to this end, the student demonstrating little aptitude might be oriented toward a more appropriate career. Discussion groups at the 1961 conference of the National Commission on Teacher Education and Professional Standards endorsed this principle and further recommended that such decisions be made by a committee because of the heavy responsibility involved.[47]

The hypothesis that verbal and English skills are related to success in a teacher-training course was not supported with this population, the correlation between CEEB-SAT (Verbal) scores and grade point average in education and psychology courses being .11 for Group I (Continuers) and .29 for Group II (Non-Continuers).

While the available data for intelligence test scores were incomplete, it was evident that there was negligible difference in measured intelligence between the group which transferred to four-

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[47]National Commission on Teacher Education and Professional Standards, op. cit., p. 17.

year institutions and the group which did not, indicating that native ability was not a major factor in transfer for these subjects.

Rank in high school graduating class was shown to be positively correlated with freshman scholastic index. The range in size of these graduating classes was impressive, from the smallest of 20 to the largest of 579--evidence for the wide variations in background and preparation common to freshman classes.

Related literature abounds in criticism directed at "personality ratings", because of dual imperfections of available instruments and raters. In this study, however, the findings were consistent, e.g., Group I (Continuers) excelled Group II (Non-Continuers) in all four dimensions of Industry, Initiative, Reliability, and Leadership. Similarly, raters elected to give more "Below Average" ratings to Group II in all four categories.

While the partial results included for The Adjustment Inventory (Bell) and the Kuder Preference Record-Vocational (which were administered during the first two years only of the period studied) are not significant, there was a certain direction to the scores.

Areas for Further Study

As preface to recommendations for further research, it should be pointed out that a pilot study at MCV resulted in the introduction in September, 1961, of an honors approach and seminar method designed to provide greater opportunity for student growth and development. The goals of the seminar approach are certainly relevant to the findings of this study as well as many similar studies of junior college students. As outlined by MCV President Mother Marie Majella Berg, R.S.H.M., these objectives are (1) training in logical thinking,

(2) command of written English, (3) facility in oral expression, (4) familiarity with social and natural sciences, (5) theological and philosophical values, and (6) command of a foreign language. Gratifying results reported early in the program include greater student enthusiasm, bettered student-faculty communication, improved attitudes of learning, and discernible difference in the quality of assigned work.[48]

Guidance and counseling (which in many cases is not available in the home) should be a continuous activity beginning before high school entrance. The essence of educational and vocational counseling lies in perceptive diagnosis of aptitudes, interests, and capacities together with, in the case of teacher-candidates, opportunities to explore teaching as a career. Institutions of higher learning should press for instruction and guidance at the high school level which will convey to pupils the long-lasting and far-reaching impact of their high school record.

Guidance techniques, also, might be designed to give students an awareness of the relationship between achievement (defined as "to get by exertion") and the traits designated by the terms Industry, Initiative, Reliability, and Leadership. Efforts could be made to stimulate the development of desired characteristics of this nature, as exemplified in the study conducted by Cassel and Shafer to design and implement a leadership training program for high school seniors. Using as vehicles the Problems of Democracy course as well as extra-curricular activities, a concerted effort was made to improve self-

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[48]Mother M. Majella Berg, R.S.H.M., "Enriched Program for Liberal Arts Students," Junior College Journal, XXXIII (October, 1962), 100-108.

knowledge, critical thinking, and leadership ability. The data indicated statistically significant leadership and social insight growth and development during the training.[49]

Research would be appropriate regarding those non-intellective factors and motivational variables which affect the plans of junior college students to transfer to four-year institutions. Investigation of social class characteristics, the influence of home and family, self-concept in relation to vocational choice, and the impact of peer-group pressures in the close community of campus life would be opportune and valuable.

Tests and measurements should be combined with subjective evaluation to profile student interests and abilities. Opportunity should be provided (1) for review of vocational choice and (2) for borderline cases to demonstrate growth through a constructive, carefully directed program. Objective tests, in this connection, can serve to reveal, for example, that the prospective teacher is, or is not, sympathetic to child personalities.

Ongoing evaluation of different kinds of teacher-training programs, course content, and instructional methods would illuminate the continuing process of curriculum revision. In this area, also, would fall the investigation of student-instructor relationships and the extent of interaction between expectation and achievement.

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[49]R. N. Cassel and A. E. Shafer, "An Experiment in Leadership Training," Journal of Psychology, LI (April, 1961), 299-305.

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